QUINN EMANUEL URQUHART & SULLIVAN, LLP
  Sean Pak (Bar No. 219032)
  seanpak@quinnemanuel.com
  Melissa Baily (Bar No. 237649)
  melissabaily@quinnemanuel.com
  James Judah (Bar No. 257112)
  jamesjudah@quinnemanuel.com
  Lindsay Cooper (Bar No. 287125)
  lindsaycooper@quinnemanuel.com
  Iman Lordgooei (Bar No. 251320)
  imanlordgooei@quinnemanuel.com
50 California Street, 22nd Floor
San Francisco, California 94111-4788
Telephone: (415) 875-6600
Facsimile: (415) 875-6700

  Marc Kaplan (pro hac vice)
  marckaplan@quinnemanuel.com
191 N. Wacker Drive, Ste 2700
Chicago, Illinois 60606
Telephone: (312) 705-7400
Facsimile: (312) 705-7401

Attorneys for GOOGLE LLC

UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

SAN FRANCISCO DIVISION

SONOS, INC., Plaintiff and Counter-Defendant, vs. GOOGLE LLC, Defendant and Counter-Claimant.	Case No. 3:20-cv-06754-WHA Consolidated with Case No. 3:21-cv-07559-WHA **GOOGLE LLC'S OPPOSITION TO SONOS'S MOTION FOR JUDGMENT AS A MATTER OF LAW UNDER RULE 50(A) (DKT. 754)** Location: Courtroom 12, 19th Floor Judge: Hon. William Alsup

GOOGLE'S OPPOSITION TO SONOS'S MOTION FOR JUDGMENT AS A MATTER OF LAW

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ASSERTED CLAIMS

'885 Patent, Claim 1:

[1.0]. A first zone player comprising:

[1.1] a network interface that is configured to communicatively couple the first zone player to at least one data network;

[1.2] one or more processors;

[1.3] a non-transitory computer-readable medium; and

[1.4] program instructions stored on the non-transitory computer-readable medium that, when executed by the one or more processors, cause the first zone player to perform functions comprising:

[1.5] while operating in a standalone mode in which the first zone player is configured to play back media individually in a networked media playback system comprising the first zone player and at least two other zone players;

[1.6] (i) receiving, from a network device over a data network, a first indication that the first zone player has been added to a first zone scene comprising a first predefined grouping of zone players including at least the first zone player and a second zone player that are to be configured for synchronous playback of media when the first zone scene is invoked; and

[1.7] (ii) receiving, from the network device over the data network, a second indication that the first zone player has been added to a second zone scene comprising a second predefined grouping of zone players including at least the first zone player and a third zone player that are to be configured for synchronous playback of media when the second zone scene is invoked, wherein the second zone player is different than the third zone player;

[1.8] after receiving the first and second indications, continuing to operate in the standalone mode until a given one of the first and second zone scenes has been selected for invocation;

[1.9] after the given one of the first and second zone scenes has been selected for invocation, receiving, from the network device over the data network, an instruction to operate in accordance with a given one of the first and second zone scenes respectively comprising a given one of the first and second predefined groupings of zone players; and

[1.10] based on the instruction, transitioning from operating in the standalone mode to operating in accordance with the given one of the first and second predefined groupings of zone players such that the first zone player is configured to coordinate with at least one other zone player in the given one of the first and second predefined groupings of zone players over a data network in order to output media in synchrony with output of media by the at least one other zone player in the given one of the first and second predefined groupings of zone players.

’966 Patent, Claim 1:

[1.0] A computing device comprising:

[1.1] one or more processors;

[1.2] a non-transitory computer-readable medium; and

[1.3] program instructions stored on the non-transitory computer-readable medium that, when executed by the one or more processors, cause the computing device to perform functions comprising:

[1.4] while serving as a controller for a networked media playback system comprising a first zone player and at least two other zone players, wherein the first zone player is operating in a standalone mode in which the first zone player is configured to play back media individually:

[1.5] receiving a first request to create a first zone scene comprising a first predefined grouping of zone players including at least the first zone player and a second zone player that are to be configured for synchronous playback of media when the first zone scene is invoked;

[1.6] based on the first request, i) causing creation of the first zone scene, ii) causing an indication of the first zone scene to be transmitted to the first zone player, and iii) causing storage of the first zone scene;

[1.7] receiving a second request to create a second zone scene comprising a second predefined grouping of zone players including at least the first zone player and a third zone player that are to be configured for synchronous playback of media when the second zone scene is invoked, wherein the third zone player is different than the second zone player;

[1.8] based on the second request, i) causing creation of the second zone scene, ii) causing an indication of the second zone scene to be transmitted to the first zone player, and iii) causing storage of the second zone scene;

[1.9] displaying a representation of the first zone scene and a representation of the second zone scene; and

[1.10] while displaying the representation of the first zone scene and the representation of the second zone scene, receiving a third request to invoke the first zone scene; and

[1.11] based on the third request, causing the first zone player to transition from operating in the standalone mode to operating in accordance with the first predefined grouping of zone players such that the first zone player is configured to coordinate with at least the second zone player to output media in synchrony with output of media by at least the second zone player.

I.   INTRODUCTION

Sonos is not entitled to judgment as a matter of law on any of the issues raised in its Motion (Dkt. 754 or "Mot."). As explained below and in Google's Motions for Judgment as a Matter of Law (Dkts. 756, 757), not only did Sonos fail to meet its burden of proof on its direct infringement, indirect infringement, willful infringement, and damages allegations against Google, but Google proved both patents-in-suit are invalid as obvious by more than clear and convincing evidence. No reasonable jury could find otherwise. Accordingly, Sonos's Motion should be denied.

II.   ARGUMENT

A.   *Sonos Did Not Prove Infringement Of The Asserted Claims*

1.   *The New Versions Of The Accused Products Do Not Practice The "Operating In Standalone" Limitations Of The Asserted '885 Claim*

Claim 1 of the '885 patent requires, *inter alia*, that a first zone player "operate[] in a standalone mode in which the first zone player is configured to play back media individually" (Lim. 1.4). The claim further requires that "while operating" in the standalone mode, the first zone player must (1) receive respective indications that it has been added to two overlapping zone scenes (Lim. 1.5, 1.6) and (2) continue to operate in standalone mode until one of those zone scenes is invoked (Lim. 1.8, 1.10). Sonos did not present sufficient evidence for a reasonable jury to find that Google speakers with its new design practice these "Standalone Limitations." *See* Dkt. 756 at 2-6.

First, Sonos has relied on an incorrect interpretation of "while operating in a standalone mode in which the first zone player is configured to playback media individually." Sonos contends that this limitation "does not require active playback." Dkt. 754 at 2, n.1. But Google provided testimony that a person of ordinary skill in the art ("POSITA") would have understood a zone player must be actively playing back media in the claimed standalone mode. *E.g.*, Trial Tr. (Schonfeld) at 1345:12-1346:9;[1] *see also* Dkt. 732 at 1, 3. Indeed, Sonos secured allowance of the '885 patent by

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[1]   Dr. Almeroth provided no opinions on this issue in his expert reports. *See* Trial Tr. (Almeroth) 1644:19-1645:10 (attempting to ask Dr. Almeroth about the prosecution history and withdrawing upon objection that this would be outside the scope of his report). When asked for his opinions regarding the Examiner's statements, he first refused to provide his opinions, testifying that "[t]he examiner said what the examiner said." Trial Tr. 871:8-874:3. After repeated attempts by Google's

1   adding the Standalone Limitations to overcome the Yamaha DME prior art and the Examiner relied

2   on the lack of continuous output of media in DME as the reason for why standalone mode was not

3   disclosed. *E.g.*, Trial Tr. (Schonfeld) at 1714:8-1715:19; TX6 at 4084-4106 (amending claims to

4   add Standalone Limitations and specification to add alleged written description support, and arguing

5   the amendments distinguish DME); *id.* at 4137 (Examiner's reasons for allowance, agreeing that

6   DME did not allow for continuously outputting media); *id.* at 5850 (same).

7   Under the correct construction, the new versions of Google's accused products do not meet

8   the Standalone Limitations because, like the Yamaha DME prior art system distinguished by Sonos

9   during prosecution, they do not continuously output media when added to a new group. Even

10   Sonos's expert concedes that, in the new design, media playback is terminated before a speaker is

11   added to a speaker group (the alleged "zone scene"). *E.g.*, Trial Tr. (Almeroth) at 799:18-22 ("And

12   so the person who's putting the speaker into the group, if it's playing in standalone mode, will stop

13   playing."). Thus, no reasonable jury could find that the new versions of Google's products infringe

14   the '885 patent under the proper understanding of "standalone mode."

15   *Second*, even if the Court adopts Sonos's construction that operating in standalone mode

16   does not require a zone player to be actively playing back media, Sonos has still failed to show it is

17

18   counsel to elicit his opinions, the Court intervened and directly asked him whether he knew if the
     Examiner's statements were accurate from memory. *Id.* The Court summarized the result: "he

19   doesn't have a good enough memory." *Id.* After more questioning on the prosecution history, Dr.
     Almeroth admitted he could not interpret those statements and had not analyzed them: "I'm going

20   to need a minute to read that because I'm not exactly sure what he's saying"; "I would have to study
     that. I don't think I can give you an opinion off the top of my head"; "I don't specifically remember

21   doing it [analyzing the prosecution history statements at issue]"; "I haven't looked at all of those
     statements to see if I agree or disagree with them." Trial Tr. 874:3-882:25.

22

23   Nevertheless, a few days later Dr. Almeroth testified, in response to questioning by the Court
     that he now **did** remember the Yamaha DME prosecution statements, and that the Examiner did not

24   "say anything about standalone mode." Trial Tr. 1646:13-1647:12. It is true that the specific
     portion of the prosecution history referred to by Dr. Almeroth did not use the words "standalone

25   mode," but Dr. Almeroth admitted it was directly related by testifying that the Examiner was
     describing a situation where "you have a speaker that's trying to join another speaker that's already

26   playing, what the consequence of that is." Trial Tr. 1647:1-12. According to the claims, "operating
     in standalone mode" describes exactly the "consequence" when you join a zone player with other

27   zone players—*i.e.*, whether the player remains in standalone mode. No reasonable jury could have
     relied on Dr. Almeroth's statements—which are contrary to the document and the claim language—

28   and contradicted his repeated disclaimer of any knowledge just days before.

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1   entitled to JMOL on infringement. In Google's new design, an accused speaker does not remain

2   "***configured to*** play back media individually" after it is added to a speaker group. Google presented

3   unrebutted evidence that the new versions of Google's accused speakers enter an idle mode before

4   being added to a speaker group. *See* Dkt. 756 at 1-3; Trial Tr. (Maclellan) at 1301:14-21. In idle

5   mode, the speakers stop media playback and "kill" (*i.e.*, tear down or terminate) any application that

6   could play back media—ensuring that the device is no longer "configured to" playback media before

7   being added to a group. *Id.* Because claim 1 of the '885 patent requires accused Google speakers

8   to "continu[e] to operate in the standalone mode until a given one of the first and second zone scenes

9   has been selected for invocation" (Lim. 1.8 and 1.10), no reasonable jury could find infringement

10   by Google's new design under either interpretation of standalone mode. *Id.* at 4-6.

11   Sonos contends that speakers in the idle mode are configured to play back media individually

12   because the speaker is "still plugged in, powered on, with code running on the device," and the "user

13   can even adjust the audio volume level and individually output audio." Dkt. 754 at 2 (citing Trial

14   Tr. (MacKay) at 1279:7-1281:10). But the audio output Sonos points to is a "little boop noise"

15   made to indicate a change in volume level—it is not any form of ***media*** playback. Trial Tr.

16   (MacKay) at 1290:2-1291:11. The "boop" is simply an audible confirmation of the new volume

17   setting so that when the user plays back media in the *future*, that audio is output at the desired

18   level. *See* Trial Tr. (MacKay) at 1291:7-11 (confirming in response to the Court's question that the

19   audio volume change does not mean "music [is] coming out of the speaker"); *see also* Trial Tr.

20   (Schonfeld) at 1466:2-14 (explaining the "boop" is not media playback). Even Dr. Almeroth

21   conceded that the playback application on the speaker is stopped. *Id.* (Almeroth) at 797:21-798:24

22   ("Within the source code, there was the addition of a function called StopCurrentApp, and that

23   function essentially stopped an app inside of the Google Player."); *see also id.* (Mackay) at 1256:23-

24   25 (Q: "And when it says 'StopCurrentApp,' are you just pausing the app?" A: "No. The app is

25   killed. It's torn down completely."), 1267:7-22 ("[StopCurrentApp()] stops the software that's

26   running the app… it tears down the app completely and removes it from memory."); *see also id.*

27   (Maclellan) at 1301:14-21. Sonos's conclusory statement that idle mode is "unequivocally a mode

28   in which the device is 'configured to play back media individually'" is incorrect and unsupported

by any facts or evidence. Dkt. 754 at 2. An accused speaker in idle mode is *not* configured to play back media because no playback application is running. It is not until the speaker later receives a launch command that it becomes configured to play back media individually or as part of a group. *E.g.*, Trial Tr. (MacKay) at 1254:21-23 ("The launch command is a command that indicates that an app should be launched and it could be launched either on a single device or on a group.").[2]

Sonos also argues that Mr. MacKay's testimony cannot support a verdict of non-infringement because he did not compare the asserted claims to the "idle" mode. Dkt. 754 at 2. Initially, this argument fails because it was **Sonos's** burden to prove infringement, not Google's burden to prove non-infringement. *Amgen, Inc. v. Apotex, Inc.*, 712 Fed. Appx. 985, 993 (Fed. Cir. 2017). Moreover, Sonos's premise that fact witnesses cannot support a finding on technical issues is false. *See, e.g.*, *id*. at 988, 993 (affirming district court's decision of no infringement based on testimony from "Apotex's fact witness, Dr. Jason Dowd," that the "maximum concentration" in the accused process was less than the claimed amount); *Biscotti Inc. v. Microsoft Corp.*, 302 F. Supp. 3d 797, 814 (E.D. Tex. 2018) (finding fact witness testimony regarding source code was sufficient to support invalidity verdict, where fact witness was "deeply involved in the conceptualization of the" relevant product). Mr. MacKay, as a designer of the accused products, was perfectly positioned to describe their operation and functionality. *E.g.*, Trial Tr. (MacKay) at 1236:15-1237:20, 1256:9-15, 1263:25-1264:5 (testifying he designed the accused functionality and new design). Moreover, although the jury was instructed to ignore any testimony *from Dr. Schonfeld* regarding "idle mode," he was still permitted to, and did, testify regarding the functionality of the accused products, including explaining that when the join_group command is executed to add speakers to a new speaker group: "the app that they're playing from is discontinued. It is stopped. It is torn down or killed, and you can no longer play music at that point in time." Trial Tr. (Schonfeld) at 1358:8-

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[2]   Dr. Almeroth himself identifies the launch command as the command that configures a speaker to play back media as part of a group. Trial Tr. (Almeroth) at 929:5-17 ("So when do they actually become configured to output media in synchrony? With the launch when they're – when the group is invoked."). Because, in the idle mode, the media playback application is unlaunched and a speaker is awaiting a launch command, Dr. Almeroth's opinion regarding standalone mode cannot be squared with his opinion regarding group mode.

13. Accordingly, the jury was presented with sufficient evidence that the accused products do **not** continue to operate in standalone mode as required by the claims or perform the required steps of the claims "while" operating in standalone mode.

Sonos argues that Google's redesigned products still allow for static speaker groups, Mot. at 2-3, but the claims of the '885 patent require more, including "operating in standalone mode" when adding a zone player to overlapping groups. Sonos also argues that Google "did not make any changes to the Google Home app," *id.*, but the claims of the '885 patent relate to the "zone players" (the accused speakers); and the changes Google made to its speaker software alters the behavior of the newly designed speakers when controlled by the Google Home app, as explained further in Section II.A.4 below. Sonos also argues that when a speaker is not engaged in active playback and is added to a new speaker group with another speaker that is also not engaged in active playback, both speakers will execute the StopCurrentApp function but there will be no "change to the operational behavior of the player beyond running that function itself." Mot. at 2-3. This scenario, however, does not demonstrate infringement; to the contrary, it proves that adding a speaker to a group and initiating group playback take place while the speakers are in idle mode, not in "standalone mode." Trial Tr. (MacKay) at 1285:3-19, 1289:11-24; *see also* Trial Tr. (Maclellan) at 1301:14-1302:11. That StopCurrentApp has no app to terminate in this scenario (because no playback app is running) means the speaker is already in idle mode, not any standalone mode.

At bottom, Sonos's motion confirms that the infringement opinions of Dr. Almeroth rest on a false premise: that any speaker not configured to play back media in a speaker group must **necessarily** be configured to play back media individually in a standalone mode. Dkt. 754 at 3-4 ("But the reality is the claims talk about two modes: You're either in group mode where you're synchronized to play in group mode or you're not, you're in standalone mode.'"). But as Google demonstrated in its motion, Dr. Almeroth cites no evidence to support his *ipse dixit* assumption that only two modes exist in Google's system.[3] Dkt. 756 at 5-6. And the unrebutted testimony from

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[3] Dr. Almeroth's opinion that the new version of Google's accused products has "an impact on the user interface" but not "what's happening in the source code," Mot. at 3, is factually incorrect and

Mr. MacKay and others establish that new versions of the accused products have *three* modes, including an idle mode in which an accused speaker is not configured to play back *any* media (individually or as part of a group). Trial Tr. at 1254:15-1255:10, 1291:13-17.

Sonos's motion should be denied because a reasonable jury could find that new versions of the accused products do not infringe claim 1 of the '885 patent. Indeed, Google's motion for JMOL should be granted because reasonable jurors must find non-infringement. *See* Dkt. 756 at 3-5.

> **2.**   ***The Accused Products (Both New And Prior Versions) Do Not Practice The '966 Patent***
>
> (a)   *Sonos Did Not Present Evidence Of Direct Infringement by Google*

The '966 patent claims a "computing device" that serves "as a controller for a networked media playback system comprising a first zone player and at least two other zone players." Sonos contends that Google directly infringes the asserted claims of the '966 patent because a phone, tablet, or laptop with the Google Home app is a "computing device" that has "the capability" to practice the asserted claims. Dkt. 754 at 4-5, 16. But Sonos presented no evidence that Google made, used,[4] offered for sale, sold, or imported a phone, tablet, or laptop pre-installed with the Google Home app (*i.e.*, performed an act of direct infringement). Indeed, because Google does not sell devices pre-installed with the Google Home app, Sonos relied primarily on an *indirect* infringement theory at trial. *E.g.*, Trial Tr. (Almeroth) at 767:11-25 ("Q. Does Google have to sell computing devices that are preinstalled with its Google Home app in order to be liable for infringement of this kind of

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should be disregarded. As both Dr. Schonfeld and Mr. Mackay testified, there *was* a source code change that resulted in a new StopCurrentApp() operation being executed before speakers are added to a group. The new operation is not part of the user interface; it is a *source code* change that results in the playback app on the device being terminated. To the extent that there are user interface implications of this functionality, that is a direct result of the underlying source code changes that introduced StopCurrentApp() in the newly designed products.

[4]   During the charge conference, Sonos generally identified "evidence of internal testing" as evidence of direct infringement, but it had no response to the fact that all of the alleged testing occurred *prior to the issuance of the asserted patents*, and instead resorted to pure speculation that "[t]hey [Google] must have tested the redesign." Trial Tr. 1771:22-1772:24. The Court noted that any damages resulting from testing "in the laboratory to come up with a redesign" would result in "about $4.22 worth of infringement damages." *Id.* 1772:18-24. But even that observation assumed, based on Sonos's representations, that there was post-patent issuance testing by Google, for which there is no evidence in the record.

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claim? A. No. It's not the case that Google would have to sell a phone with the app pre-installed in order for there to be infringement. There's other ways that Google could infringe . . . part of this analysis is looking at whether or not Google would encourage the use of the Home app.").

Furthermore, the Court has recognized that "the mere installation of the Google Home app on a computer device does not itself infringe" because "a computing device is not capable of serving as a controller unless it is networked with at least three zone players that may be added to overlapping zone scenes." Dkt. 762 at 15; *see also* Dkt. 721 at 3-5 (explaining that Sonos failed to meet its burden of proving any Google App installation is capable of "causing storage" under the asserted '966 patent claims without additional Google speaker hardware). "Until, if ever, a computing device with the Google Home app installed is networked with at least three zone players that may be added to overlapping zone scenes using the Google Home app, it cannot fall within the claims of the '966 patent." Dkt. 762 at 15-16; *see also* Dkt. 721 at 1-3. Accordingly, even if Sonos had presented evidence that Google made, sold, used, or imported a device pre-installed with the Google Home app (it did not), Sonos's direct infringement claim would still fail because it presented no evidence that Google made, sold, used, or imported a computing device installed with the Google Home app networked "with at least three zone players." Moreover, for the reasons described above, the newly designed Google speakers do not satisfy the "operating in a standalone mode" limitation in both patents, and thus any combination of the Google Home app with such speakers would also result in non-infringement for the '966 patent. Because this limitation deals with the accused speakers, no change was needed to the Google Home app to implement a non-infringing design.

        (b)   *Both The New And Prior Versions Of The Accused Products Do Not Practice The "Causing Storage" Elements Of The Claims*

Undisputed testimony established that Google's speakers manage groups dynamically and do not "store" zone scene membership as required by the claims and the Court's construction of "zone scene," which requires a previously-saved "grouping" (*i.e.,* identification of zone players belonging as members of each zone scene). *See* Trial Tr. (MacKay) at 1276:9-14 ("The group membership we ***don't store*** persistently."). As demonstrated by unrebutted evidence at trial, Google's accused devices use an architecture where "each device ***doesn't . . . have stored***

information about what other members of the group exist so it ***doesn't know*** which other devices are members of that group." Trial Tr. (MacKay) at 1240:23-1241:3; 1241:20-1242:8; *id*. (Schonfeld) at 1367:14-1373:17; TX6454. Instead, Google's system operates dynamically without persistent storage of the grouping because the system "only care[s] about the ***current*** state of the network." Trial Tr. (MacKay) at 1242:1-8 (emphasis added); *see also id*. (Maclellan) at 1299:18-1301:4; *id*. (Pedro) at 1312:21-1317:11. The "group configuration" on each speaker is limited to storing an identifier and name(s) of the speaker group(s) that that speaker belongs to; it does not and cannot identify any other members of any groups. Trial Tr. at 1242:10-1245:7 (discussing TX6453, explaining that the JoinGroup message includes the Group UUID and Group Name, neither of which contains membership information for the group); *id*. (MacKay) at 1367:14-1373:17; *see also id*. (Schonfeld) at 1373:7-17.

Sonos argues that "storage" can take place in either volatile or nonvolatile memory. Mot. at 8. That is a red herring, because Dr. Schonfeld's opinions were not based on whether information is stored in volatile or nonvolatile memory; rather, he opined only that the storage of information must be persistent in that the group membership must be ***stored for later use in invoking that group***, which is consistent with Sonos's own expert, Dr. Almeroth, who likewise opined that storage of zone scenes must be "persistent" (*i.e.*, not temporary) whether stored in volatile or nonvolatile memory. Trial Tr. (Almeroth) at 899:18-901:11 ("the user created groups that are predefined and pre-saved as part of the zone scenes are persistent"); *id*. (Schonfeld) at 1367:21-1368:3 ("what does storing of zone scenes require? A. So that would require that you take the members of the group and you store them, put them somewhere so it's available persistently"). The specific type of memory required for a "zone scene" was not at issue at trial.

Sonos next selectively quotes testimony from Mr. MacKay, while ignoring his consistent explanations regarding what is and is not stored in the accused products. *See* Trial Tr. (MacKay) at 1277:5-9 (testifying that the players in the group "only persistently store the name and ID of the group"). Specifically, Sonos contends that the "group UUID" meets the storage limitation despite Mr. MacKay's unrebutted testimony that the group UUID is "a random string essentially" and "***doesn't contain*** information about the identity of the members." *Id.* at 1243:23-12:44:1. Mr.

1   MacKay further testified that the "name that the user assigned to the group" "***does not***" "***contain***"

2   any information about the actual grouping or membership information of a group." *Id.* 12:44:2-

3   8. Nor does the testing information that Google uses internally contain any grouping or membership

4   of a group, as required by the Court's construction of "zone scene." *Id.* at 12:44:9-1245:7.

5   In sum, Google showed that the accused products do not cause storage of the claimed "zone

6   scenes" as construed, and Sonos's motion must be denied. Because no reasonable jury could find

7   in Sonos's favor on this issue, Google's JMOL motion should be granted. *See* Dkt. 756 at 9-11.

8   **3.**   ***Google Has Not Indirectly Infringed The Asserted '966 Patent Claims***

9   Sonos contends that Google has induced infringement of the '966 patent by "encourag[ing]

10   people to install the Home App on their computing devices" and contributorily infringed the '966

11   patent by "offering the Google Home app for installation on internet-connected computing

12   devices." *See* Mot. at 13-16, 18. Sonos failed to put forth a legally sufficient evidentiary basis for

13   a reasonable jury to find indirect infringement under either theory.

14   (a)   *Sonos Did Not Present Evidence Of Any Direct Infringement*

15   To establish induced and contributory infringement, Sonos must first prove that "a third

16   party directly infringed the asserted claims" of the '966 patent. *Power Integrations, Inc. v. Fairchild*

17   *Semiconductor Int'l, Inc.*, 843 F.3d 1315, 1332 (Fed. Cir. 2016); *see also Limelight Networks, Inc.*

18   *v. Akamai Techs., Inc.*, 572 U.S. 915, 921 (2014); Dkt. 762 at 17-18. Sonos "must either point to

19   specific instances of direct infringement or show that the accused device necessarily infringes the

20   patent in suit" to prove indirect infringement. *ACCO Brands, Inc. v. ABA Locks Mfrs. Co.*, 501 F.3d

21   1307, 1313 (Fed. Cir. 2007). Sonos did neither.

22   (i)   Sonos Did Not Identify A Single Specific Instance Of Direct
                Infringement By A Third Party

23

24   Although Sonos admits that indirect infringement requires an underlying act of direct

25   infringement, its Motion does not address or identify direct infringement by third parties. Mot. at

26   13-16, 18. The record is similarly devoid of any evidence of direct infringement by a third

27   party. While the record establishes that consumers have installed Google Home on computing

28   devices, and have used the app to create speaker groups, it does not establish any instance in which

a consumer had a "computing device[] networked with at least three zone players that may be added to overlapping zone scenes using the Google Home app[.]" Dkt. 762 at 15.

> (ii)   The Record Establishes That The Accused Products Do Not Necessarily Infringe The '966 Patent

If "the accused device can be used at any given time in a noninfringing manner, the accused device does not necessarily infringe[.]" *ACCO*, 501 F.3d at 1313. Here, the record demonstrates that computing devices (*e.g.*, smartphones) with Google Home installed have many non-infringing uses. Even Dr. Almeroth admitted that the accused computing devices have "thousands" of non-infringing features. Trial Tr. at 912:19-913:22. The Google Home app likewise has a great many non-infringing uses, such as controlling lightbulbs, thermostats, ovens, and cameras, and even non-patented speaker and grouping features such as setting up one speaker or playing music to one speaker group. *Id.* (Malackowski) at 1153:21-1154:13; *id.* (Pedro) at 1306:19-1309:14.

> (b)   *No Reasonable Jury Could Find That Google Had Knowledge Of The '966 Patent And Specific Intent To Infringe The '966 Patent*

"[B]oth forms of indirect infringement — induced and contributory infringement — require knowledge of the patent and knowledge of infringement." *Sonos, Inc. v. Google LLC*, 591 F. Supp. 3d 638, 647 (N.D. Cal. 2022). Sonos contends that Google "had notice of the '966 patent and knowledge that its acts were causing infringement of the '966 patent" as a result of (1) the draft complaint Sonos sent Google on September 28, 2020 (TX6136) and (2) the declaratory judgment complaint Google filed the same day (TX8260). Mot. at 15-16. Both are insufficient to establish the requisite knowledge and specific intent for indirect infringement.

Sonos has not offered any proof of Google's knowledge of the '966 patent beyond Sonos's draft complaint and the Court's suggested inferences from Google's declaratory judgment complaint.[5] But even if the jury accepts that Google's declaratory judgment complaint is circumstantial evidence of knowledge before Sonos filed suit, there is still ***no evidence*** that Google had a ***specific intent to infringe*** the '966 patent. To the contrary, Google's declaratory judgment complaint demonstrates a good faith belief in non-infringement rather than any specific intent to

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[5]   Sonos never sent Google any cease and desist letter that identified the '966 patent.

infringe. There is no logical basis to presume that Google's allegation of non-infringement is factual

support for the exact opposite proposition. *E.g.*, *Apple Inc. v. Princeps Interface Techs. LLC*, 2020

WL 1478350, at *4 (N.D. Cal. 2020) ("Apple, in filing an action seeking a declaratory judgment of

noninfringement, arguably asserts a 'reasonable, good-faith belief in noninfringement,' which 'can

negate the specific intent required for induced infringement.'") (citation omitted); *Google LLC v.*

Princeps Interface Techs. LLC, 2020 WL 1478352, at *4 (N.D. Cal. Mar. 26, 2020) (same); *see also*

Lemley, *Inducing Patent Infringement*, 39 U.C. Davis. L. Rev. 225, 243 (2005) ("[I]t is not

reasonable to assume that merely because a defendant is aware of the existence of a patent, he

intended to infringe it."). Indeed, "if an accused infringer 'reads the patent's claims differently from

the plaintiff,' and if 'that reading is reasonable,' then the accused infringer should not be liable for

indirect infringement." *Koninklijke Philips N.V. v. Zoll Med. Corp.*, 656 F. App'x 504, 523 (Fed.

Cir. 2016) (quoting *Commil USA, LLC v. Cisco Sys., Inc.*, 575 U.S. 632, 642 (2015)).

Here, Google's good faith belief in non-infringement was reasonable, and Sonos did not

present evidence regarding Google's subjective belief. The only evidence bearing on Google's

specific intent to infringe is Google's declaratory judgment complaint, which is evidence of

Google's subjective belief of ***non-infringement***. The Court should deny Sonos's motion for JMOL

as to Google's knowledge of the '966 patent and infringement and grant JMOL in Google's favor.

    (c)   *Sonos Has Not Shown That Google Intended To*
            Encourage Direct Infringement Of The '966 Patent

Sonos has also failed to establish induced infringement because it has not shown that Google

had an "intent to encourage infringement." *Fluidigm Corp. v. IONpath, Inc.*, No. C 19-05639 WHA,

2020 WL 408988, at *3 (N.D. Cal. Jan. 24, 2020). To prove induced infringement, Sonos must

prove Google had "the requisite intent to induce infringement, which [the Federal Circuit has] held

requires that the alleged infringer knew or should have known his actions would induce actual

infringements." *Barry v. Medtronic, Inc.*, 914 F.3d 1310, 1334 (Fed. Cir. 2019). "[M]ere

knowledge of possible infringement will not suffice." *Vita-Mix Corp. v. Basic Holding, Inc.*, 581

F.3d 1317, 1328 (Fed. Cir. 2009). ""[I]nducement requires evidence of culpable conduct[.]" *Lucent*

Techs., Inc. v. Gateway, Inc., 580 F.3d 1301, 1321-22 (Fed. Cir. 2009) (quoting *DSU Med. Corp. v.*

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JMS Co., 471 F.3d 1293, 1306 (Fed. Cir. 2006)).   Here, the record shows at most that Google "merely s[old] a commercial product suitable for some lawful use." *California Beach Co., LLC v. Exqline, Inc.*, No. C 20-01994 WHA, 2020 WL 6544457, at *2 (N.D. Cal. Nov. 7, 2020).

Sonos claims that "Google took active steps to induce infringement" because Google "encourages people to install the Home App on their computing devices," "encourages people to use the accused functionality to create speaker groups," and "provides instructions to customers on how to create multizone groups of two or more speakers." Mot. at 13-14. But all of this is non-infringing functionality. *See Kyocera Wireless Corp. v. International Trade Comm'n*, 545 F.3d 1340, 1353-1354 (Fed. Cir. 2008); *Takeda Pharms. U.S.A., Inc. v. W.-Ward Pharm. Corp.*, 785 F.3d 625, 631 (Fed. Cir. 2015) (emphases added) (citation omitted). And nothing in the record suggests that Google encouraged users to download the Google Home app in order to network three or more speakers (or create two overlapping static speaker groups). Because Sonos "failed to propound sufficient evidence that any of [Google]'s customers or end users actually enabled the [accused] feature on an accused product," it cannot establish intent to encourage infringement. *CIF Licensing, LLC v. Agere Sys. Inc.*, 727 F. Supp. 2d 337, 353 (D. Del. 2010); *see also ACCO Brands, Inc. v. ABA Locks Mfrs. Co.*, 501 F.3d 1307, 1312-14 (Fed. Cir. 2007).

Sonos also failed to present evidence that any purported attempt to induce users to infringe ever reached alleged infringers. Inducement "requires successful communication between the alleged inducer and the third-party direct infringer." *Power Integrations, Inc. v. Fairchild Semi. Int'l, Inc.*, 843 F.3d 1315, 1330–31 (Fed. Cir. 2016). Thus, the Court's instructions to the jury expressly require a finding that Google has "intentionally taken action that ***actually*** induced infringement" to satisfy inducement. Dkt. 762 at 18 (emphasis added). Here, the record is devoid of any evidence that Google succeeded in encouraging any user to infringe the '966 patent.

Finally, Sonos's motion ignores Google's efforts to redesign its products to avoid infringement. "[F]ailure to remove or diminish infringing features of a distributed product is relevant to a party's intent that those features be used for direct infringement." *Ricoh Co. v. Quanta Computer Inc.*, 550 F.3d 1325, 1343 (Fed. Cir. 2008). Google's redesign demonstrates that Google did not intend to encourage infringement of the '966 patent. (*See* Section II.A.4.)

4. *New Versions Of The Accused Products Do Not Practice The Standalone Limitation Of The Asserted Claims Of The '966 Patent*

Claim 1 of the '966 patent includes substantially the same Standalone Limitations as claim 1 of the '885 patent. It requires that the accused Google Home app cause creation of a first and second zone scene (Lim. 1.5-1.8) "*while* serving as a controller for a networked media playback system comprising a first zone player and at least two other zone players, wherein *the first zone player is operating in a standalone mode* in which the first zone player is configured to playback media individually" (Lim. 1.4) (emphases added). The zone player must then continue to operate in that standalone mode until it receives a request to invoke a zone scene (Lim. 1.9-10). The new versions of the accused products do not practice these limitations of the '996 patent for the reasons discussed in connection with the '885 patent: Google's speakers with the new design do not continue to operate in a standalone mode from the moment they are added to a group until a request for invocation is received. Rather, immediately before being added to the group, speakers with the new design switch to an idle mode in which they are not configured to and cannot play media. *See* Section II.A.1; Dkt. 756 at 6-7; *see also* Trial Tr. (Maclellan) at 1301:8-1302:11 (explaining that the idle mode interrupts any continuous operation in the standalone mode that the device was in when it was being added to a group); *id*. (Schonfeld) at 1331:3-1332:7 (same).

Sonos contends that new versions of the accused products still infringe because the redesign changed the source code on the accused Google speakers rather than the source code of the Google Home app. Dkt. 754 at 16 ("Google did not make a single change to the source code or operation of the Home App… The only change was … on the speakers."). This argument is a red herring because it is undisputed that the Google Home app must perform certain steps while the accused Google speakers are operating in the standalone mode. Indeed, the Court recognized that "the mere installation of the Google Home app on a computing device does not itself infringe," and that the infringement determination must evaluate a computing device that is "networked with at least three zone players that may be added to overlapping zone scenes using the Google Home app." Dkt. 762 (Corrected Final Charge To The Jury) at 15. The alleged "zone players," Google's accused speakers, do not meet the Standalone Limitations in the new design. Thus, Sonos's JMOL must be

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1   denied, and Google's motion should be granted.

2   Sonos argues in passing that the '966 patent does not require that Limitations 1.6-1.10—*i.e.*,

3   creating and saving overlapping zone scenes and displaying them for invocation—"happen while

4   the device *continues* to operate in standalone mode." Dkt. 754 at 16. But Dr. Almeroth agreed that

5   claim 1 of the '966 patent requires that Google Home perform these limitations "while" an accused

6   Google speaker is operating in the standalone mode, including "receiving a third request to invoke

7   the first zone scene." Trial Tr. (Almeroth) at 986:4-987:17. Sonos's suggestion that a speaker may

8   ping-pong in and out of the standalone mode when performing Limitations 1.6-1.10 is at odds with

9   a reasonable reading of the claim language. The claim language requires that the first zone player

10 continue to operate in **the** standalone mode until the first zone scene is invoked. Moreover, even

11 assuming Sonos's claim interpretation is correct, there is still no infringement by speakers using

12 Google's new design because even if those speakers are somehow in a standalone mode when

13 receiving a request for invocation of a group, they will never be in **the same** standalone mode as

14 when the group was created. *E.g.*, Trial Tr. (Maclellan) at 1301:8-1302:11; *id.* (Schonfeld) at

15 1331:3-1332:7. Thus, Sonos failed to prove infringement of the '966 patent under any theory.

16   **5.   *Sonos Has Not Proved Willful Infringement Of The '966 Patent***

17   As this Court has held, Sonos "must prove knowledge of the patent and knowledge of

18 infringement" in order to establish that Google willfully infringed the '966 patent. *Sonos, Inc. v.*

19 *Google LLC*, No. 21-cv-7559-WHA, Dkt. 156 at 4 (N.D. Cal. Mar. 16, 2022). In addition, "the

20 patentee must show the accused infringer had a specific intent to infringe at the time of the

21 challenged conduct." *Id.* (quoting *Bayer Healthcare LLC v. Baxalta Inc.*, 989 F.3d 964, 987-88

22 (Fed. Cir. 2021)). For the reasons discussed above, Sonos has failed to provide any legally sufficient

23 evidentiary basis to conclude that Google either had knowledge of or the specific intent to infringe

24 the '966 patent. *See supra* Section II.A.3(b); *see also* Dkt. 756 at 12-13.[6]

25

26 ⁶ In addition, Sonos's attempt to imply specific intent to infringe by eliciting an adverse inference
27 through Google's invocation of attorney-client privilege was improper. *Knorr-Bremse Systeme*
    Fuer Nutzfahrzeuge GmbH v. Dana Corp., 383 F.3d 1337, 1344 (Fed. Cir. 2004) ("When the
28 attorney-client privilege and/or work-product privilege is invoked by a defendant in an infringement

B.   ***Sonos Is Not Entitled To Damages Based on Evidence From its Case-in-Chief***

Sonos's conclusory assertion that it is entitled to damages based on evidence from its case-in-chief—without providing any viable method of calculating those damages—falls far short of the high standard for judgment as a matter of law. In this case, Sonos has failed to present any legally sufficient evidence of an appropriate royalty rate, royalty base, or apportionment. *See Finjan, Inc. v. Blue Coat Sys., Inc.*, 879 F.3d 1299, 1310 (Fed. Cir. 2018).

With respect to the royalty base for the '966 patent, Sonos did not provide any evidence at all regarding the number of "computing devices networked with at least three zone players that may be added to overlapping zone scenes using the Google Home app[.]" Dkt. 762 at 15. As for the royalty rate for both patents, the only evidence that Sonos points to is testimony from its general counsel regarding Sonos's supposed "robust" patent portfolio and three Sonos licenses that Sonos has conceded are not comparable.[7] Mot. at 17-18; *see* Trial Tr. (Malackowski) at 1163:6-11 ("Q. And you say (as read): 'Mr. Bakewell and I both agree that [the Sonos-Legrand] agreement is not comparable to the hypothetical license that would be granted in this matter.' Right? A. True."); *id.* at 1164:3-16 ("Q. And it is your opinion that the Sonos-Lenbrook license is not probative of the outcome of a hypothetical negotiation in this case; correct? A. In the same way, yes, ma'am. Q. And you looked at the Sonos-Denon agreement? A. Yes. Q. And it's your opinion that this agreement is not probative of the outcome of a hypothetical negotiation in this case either; correct? A. . . . yes."). And even if Sonos had provided sufficient evidence that those licenses were somehow relevant (it has not), Sonos did not even attempt to apportion the per-unit rates found therein to the patented technology. *See* Trial. Tr. (Kwasizur) at 1060:8-1068:8 (Sonos's General Counsel testifying that the royalty rates for its agreements were all for over 1,000 patents but admitting the hypothetical license would only be for the two asserted patents).

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suit, is it appropriate for the trier of fact to draw an adverse inference with respect to willful infringement? The answer is "no."")

[7]   Sonos suggests that the jury could utilize the $0.82 and $0.87 royalty rates calculated by Mr. Malackowski to award damages, but no reasonable jury could utilize this information because those rates were based on the IFTTT theory, which the Court instructed the jury to disregard because it failed to "meet[] the minimum requirements for admissibility." Dkt. 762 at 22-23.

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1   Sonos thus has not identified any evidence from its case-in-chief that would support damages

2   that it "more likely than not suffered" or that are not "remote or speculative." Dkt. 762 at 21.

3   **C.   *The Asserted Claims Of The '885 And '966 Patents Are Invalid***

4   Google respectfully requests that the Court deny Sonos's motion for judgment as a matter

5   of law that claim 1 of the '885 patent, and claims 1, 2, 4, 6, and 8 of the '966 patent are valid (Dkt.

6   754), and instead grant Google's motion for judgment as a matter of law that claim 1 of the '885

7   patent, and claims 1, 2, 4, 6, and 8 of the '966 patent are invalid (Dkt. 757).

8   **1.   *The Prior Art Teaches Or Renders Obvious '966 Patent Lim. 1.9 and 1.10***

9   *First*, Sonos challenges the sufficiency of Google's obviousness showing as to only two

10   limitations of the '966 patent: Limitations 1.9 and 1.10. Mot. at 19-20. Sonos does not challenge

11   Google's evidence of obviousness for any limitation of the '885 patent. *Id.* And, Sonos's arguments

12   once again misunderstand and misrepresent Dr. Schonfeld's opinions. Dr. Schonfeld did not testify

13   that limitation 1.9 and 1.10 of the '966 patent are identical to limitations 1.6 and 1.7 of the '885

14   patent. *Contra* Mot. at 19-20. Given the large overlap in subject matter claimed in the two patents,

15   Dr. Schonfeld, consistent with his expert report, opined that the same "***evidence and analysis***" of

16   the entire Sonos 2005 prior art system and related obviousness combinations identified for various

17   claim elements of the '885 patent sufficed to prove invalidity of claim elements of the '966

18   patent. Trial Tr. at 1390:3-11 ("I didn't present my analysis from the point view of a ZonePlayer or

19   from the controller point of view. I presented it from a bird's-eye point of view as for the ***system as***

20   ***a whole***, and I presented it once and applied it for both claims."). As Google has explained, and as

21   even Dr. Almeroth testified at trial, the '885 patent and the '966 patent are essentially "two sides"

22   of the same coin, with the exception of the extra "causing storage" element. Trial Tr. (Almeroth) at

23   693:11-694:18-22. There is no requirement that Dr. Schonfeld repeat the same words over and over

24   again for both the '885 and '966 patent. Indeed, Sonos does not cite a ***single case*** finding that JMOL

25   was appropriate in a similar situation.

26   *Second,* Sonos also does not address the substance of Dr. Schonfeld's testimony—*i.e.*,

27   whether he identified prior art disclosures for the "displaying a representation" elements that Sonos

28   disputes. Dr. Schonfeld did address them in his testimony. Notably, Sonos does not substantively

1   dispute that Dr. Schonfeld adequately identified zone scenes disclosures in the prior art—and it only

2   spends a single sentence arguing, without support, that Dr. Schonfeld "pointed only to temporary

3   groups or groups that are invoked immediately upon creation."[8] Mot. at 20. Dr. Schonfeld

4   presented testimony and evidence showing the presence of zone scenes in at least the Sonos Forums,

5   Nourse, and Squeezebox prior art, and all that evidence was unrebutted by Dr. Almeroth. *See* Dkt.

6   757 at 2, 4-17; Trial Tr. (Schonfeld) at 1422:15-1451:9; Trial Tr. (Almeroth) at 1641:13-1709:1.

7   The only point Sonos substantively contests is whether zone scenes were ***displayed*** in the

8   prior art, not whether they existed. Review of Dr. Schonfeld's testimony, however, makes clear that

9   he testified at length regarding the "display" of one or more zone scenes. For claim element 1.9,

10   Dr. Schonfeld identified the "controller, the CR100[,] as well as the desktop computer with a user

11   interface." *E.g.*, Trial Tr. (Schonfeld) at 1377:18-1378:11. The desktop controller had a display

12   monitor, and the CR100 handheld controller had its only user interface display. Both were shown

13   to the jury and described at length by Dr. Schonfeld as well as Sonos's engineers. Trial Tr.

14   (Schonfeld) at 1376:18-1377:4, 1421:2-1422:14; Trial Tr. (Millington) at 320:6-326:23, 336:1-

15   340:4, 359:9-13. Dr. Schonfeld explained that the user interface of the Sonos 2005 system allowed

16   the system to link zones together and show the results of that linking. *E.g.*, Trial Tr. (Schonfeld) at

17   1380:14-1381:1 ("it shows the display on the controller which shows that the kitchen ZonePlayer

18   corresponding to, let's say, ZonePlayer 102 is linked together with ZonePlayer 104, which is the

19   patio, and now it's available for playing music in synchrony once you decide to invoke it."). Dr.

20   Schonfeld testified that this same functionality applied to the Sonos 2005 System's party mode zone

21   scene. *E.g.*, Trial Tr. (Schonfeld) 1384:2-14 ("which it has this ability with a single touch to do

22   what would be required before the zone scene idea to go through individually and link all of the

23   ZonePlayers together so it can save the number of touches that you have to perform"); *id.* 1386:21-

24

25   _____

26   [8]   This argument is meritless given that Sonos's inventor admitted that the prior art taught
     overlapping zone scenes, Trial Tr. (Lambourne) at 466:19-22, 536:20-539:25, and that the
27   "shipping" prior art Sonos 2005 System had "zone scenes," *id.* (Lambourne) at 420:1-7, 489:23-
     25, 490:1-5, 502:25-503:1-2, 503:12-23, 505:9-23. Dr. Schonfeld also testified at length regarding
28   how the prior art taught zone scenes, but Sonos makes no effort to address his testimony. *Id.*
     (Schonfeld) at 1381:8-1388:15, 1433:17-1437:9, 1449:11-1451:9, 1504:21-1505:24.

1387:10 ("on the controller . . . it would give you the option of which other ZonePlayers you want to connect to and it would give you ZonePlayer 104, 106, and also give you the option of Party Mode. You could press 'Party Mode,' . . . ."). Dr. Schonfeld clearly identified the "displaying" claim limitations in the prior art.

        2.   ***Google Proved The Motivation To Modify Or Combine The Prior Art***

Sonos's contention that "Google did not show a motivation to combine" ignores the record evidence. Dkt. 754 at 20-21. The Supreme Court has explained that a motivation to combine or modify the prior art may be found in "any need or problem known in the field of endeavor at the time of the invention and addressed by the patent." *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 420 (2007). Google demonstrated that the prior art Sonos 2005 system included the ability to create, save and invoke a first zone scene called "party mode." *See* Dkt. 757 at 4; Trial Tr. (Millington) 324:7-22, 327:3-328:1; TX0062 at 30; TX0063 at 3-4; TX3923 (Lambourne Decl.) ¶ 6; Trial Tr. (Lambourne) at 420:1-7, 489:23-25, 490:1-5, 502:25-503:1-2, 503:12-23, 505:9-23; Trial Tr. (Schonfeld) at 1713:9-1714:71384:15-24; TX6544 at 27; TX3941 at 1; TX0120 at 1. Google also presented unrebutted evidence that at the time of the alleged invention a known problem with the prior art Sonos 2005 system was the inability to create and save a second, overlapping zone scene for later invocation. Dkt. 757 at 8-9, Trial Tr. (Schonfeld) at 1334:1-1335:8 (agreement on level of skill of POSITA); *id.* at 1712:18-1713:6 (obviousness for Sonos 2005 in view of POSITA), TX2426 (Yamaha) at 55 and Trial Tr. (Schonfeld) at 1342:6-1347:16, TX6000 (Bose) at 7, 10, 44 and Trial Tr. (Schonfeld) at 1351:4-1352:2 (Bose), TX3937 (Squeezebox), TX6513 (Nourse) at Abstract, Trial Tr. (Schonfeld) 1423:22-1424:18, 1431:22-1432:4, 1434:16-1435:2

For example, Google presented Sonos Forum postings in which users explained that one problem with the prior art Sonos 2005 system was the burden associated with "manually linking/unlinking" speakers to form dynamic speaker groups. *Id*.; *see also* TX2425 at 1, TX3930 at 1-2 (same). These prior art postings expressly disclosed adding to the Sonos 2005 system the ***ability to create and save additional, overlapping party modes*** that could be invoked at a later time using a single command to overcome the problem with dynamic grouping. *See* Dkt. 757 at 14-15; *see also* TX2425 at 1, TX3930, Trial Tr. (Lambourne) at 528:11-25, *see also id*. at 466:19-22, 531:15-

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22, 537:21-25, 538:1-25, 541:22-542:12, 546:8-13, 548:8-17, Trial Tr. (Schonfeld) at 1431:22-1432:4, 1423:22-1424:18, 1434:16-1435:2. In fact, the postings make clear that the desirability of implementing overlapping zone scenes in the Sonos 2005 system would have been immediately recognizable to a person of skill in the art. *See, e.g.*, TX3930 ("*Just got the intro bundle*…I would have 2 party modes, Summer and Winter.") (emphasis added). In fact, Mr. Lambourne, on cross examination, admitted that he saw the **same problem and same solution** as his alleged invention being explicitly disclosed in the prior art Sonos Forum postings. *Id*. (Lambourne) at 541:2-7; *see also id*. (Schonfeld) at 1436:17-1437:9. Mr. Lambourne's testimony also confirms that a POSITA would look to the Sonos Forum postings when deciding how to modify the prior art Sonos 2005 system with new features. Trial Tr. (Lambourne) at 466:19-467:1, 532:9-21, 533:11-20. *See also* Trial Tr. (Lambourne) at 532:9-533:20, 466:19-467:18, Trial Tr. (Schonfeld) at 1431:22-1432:4.

Google also presented the Squeezebox system, and Google established (and Sonos admitted) that a person of ordinary skill in the art would have looked to Squeezebox. *See e.g.,* Trial Tr. (Schonfeld) at 1443:1-8, 1444:5-15; 1451:2-1455:2, Trial Tr. (Lambourne) at 556:15-22; 557:24-558:3; TX2831. Google also presented Nourse and established that a POSITA would have been motivated to combine the Sonos 2005 system with Nourse to include storage of a second overlapping zone scene. *See e.g.,* Trial Tr. (Schonfeld) at 1439:24-1440:19, 1441:4-10. Thus, the record was replete with evidence teaching the clear advantages of adding a second, overlapping zone scene to the Sonos 2005 system.

Sonos's own attempts to show that Google did not establish a motivation to modify or combine defeat its argument. Sonos takes issue with unrebutted testimony from Dr. Schonfeld that a POSITA would be motivated to combine the teachings of the Nourse patent with the Sonos 2005 system because Nourse was in the same field as the asserted patents and disclosed known techniques for addressing "very similar problems of managing and saving groups and making them available and flexible to play individually or play later." Dkt. 754 at 21 (citing Trial Tr. (Schonfeld) at 1441:4-10). Similarly, Sonos points to unrebutted testimony that Squeezebox was a "competitor" in the same field as Sonos, and that Sonos (including the named inventor) looked to the prior art Squeezebox system's techniques for saving and invoking speaker groups when implementing

speaker grouping in the Sonos products. Dkt. 754 at 21 (citing Trial Tr. (Schonfeld) at 1443:5-8); *see also id*. (Lambourne) at 561:12-566:18. Although Sonos suggests that this testimony is insufficient to establish a motivation to combine, the Federal Circuit has held that similar testimony can establish a motivation to combine. *See Intel Corp. v. PACT XPP Schweiz AG*, 61 F. 4th 1373, 1380 (Fed. Cir. 2023) (reversing a determination of no motivation to combine where "Intel asserted that a person of ordinary skill would have been motivated to combine" two prior art reference because "they relate to the same field of multiprocessor" systems and "address the same problem: maintaining cache coherency"); *see also KSR*, 550 U.S. at 417 (motivation to combine exists where a known technique "has been used to improve one device, and a person of ordinary skill in the art would recognized that it would improve similar devices in the same way."). The evidence was so strong that no reasonable jury could find that Google did *not* establish a motivation to combine.

### 3.	*Google Proved A Reasonable Expectation of Success*

Sonos also argues that Google did not establish that a POSITA would have a reasonable expectation of success in achieving the claimed invention. Dkt. 754 at 21-22. Not so. Contrary to Sonos's suggestion, Dr. Schonfeld's testimony that a POSITA would have had a reasonable expectation of success in modifying the Sonos 2005 system was not "conclusory." Dkt. 754 at 22. For example, Dr. Schonfeld showed that the examiner concluded during prosecution that a POSITA **would have known "as a matter of routine experimentation"** how to create, save, and recall/invoke speaker groupings. Trial Tr. at 1343:5-13445:8. Dr. Schonfeld also showed that the prior art and inventor of the asserted patents, Mr. Lambourne, both described the same solution for implementing a second, overlapping zone scene, namely the use of "macros." Trial Tr. (Lambourne) at 528:23-529:4, 531:15-32:4, 538:1-14 541:2-542:12. And Dr. Schonfeld showed that saving a speaker group for later invocation would have been a trivial and straightforward modification to the Sonos 2005 system. *See e.g.*, Trial Tr. at 1388:22-1389:12 ("Q. [h]ow obvious would it be to modify the Sonos 2005 system to create -- to save the first zone group here that you've already created in the system? A. It will be a ***trivial change*** in my view. Q. And why would it be trivial? A. Because we are talking about saving it for later, which means something very simple."), *id.* at 1423:22-1425:2 ("Q. How difficult would it have been back in 2005 timeframe to a person of

-20-

ordinary skill in the art to make the modification of saving one of the extra groups that was provided

for in that system? A. It would be a trivial step in my view, and I can explain why. . . . how difficult

. . . would it have been for that person back in 2005 to make the simple modifications that you were

just describing? A. In my opinion, it would have been a trivial exercise to do. ***You are just shifting***

one code and not discarding the identifiers. That's a very simple operation to do in the code."), *id.*

at 1425:5-18 ("would it have been obvious to make the modification that you talked about to save

the first zone group here for later? Is that your testimony? A. It is my testimony. The moment you

just decide that that's what you want to do, ***you can do it immediately***."), 1426:2-7.

Sonos claims that Dr. Schonfeld's testimony was insufficient, but does not identify any

obstacles that would need to be overcome or any unpredictability that would exist in making the

combination. Dkt. 754 at 21-22. Nor could it, since its expert Dr. Almeroth provided no rebuttal

opinion at trial on this point, consistent with his expert reports. Moreover, the level of detail Sonos

demands is inconsistent with Mr. Lambourne being a user interface designer, not a computer or

electrical engineer. Trial Tr. (Lambourne) at 530:2-11, 531:5-14, 409:9-20. It is also inconsistent

with the sparsity of the disclosures in the asserted patents relating to configuring and invoking zone

scenes. *See In re Epstein*, 32 F.3d 1559, 1568 (Fed. Cir. 1994) ("[T]he Board's observation that

appellant did not provide the type of detail in his specification that he now argues is necessary in

prior art references supports the Board's finding that one skilled in the art would have known how

to implement the features of the references and would have concluded that the reference disclosures

would have been enabling."); *Uber Tech., Inc. v. X One, Inc.*, 957 F.3d 1334, 1349 (2020) ("The

specification of the '593 patent is entirely silent on how to transmit user locations and maps from a

server to a user's mobile device, suggesting that a person of ordinary skill in the art was more than

capable of selecting between the known methods of accomplishing this."); *In re Publicover*, 813 F.

App'x 527, 532 (2020) ("Publicover argues that Venable and Kiderman's disclosures are too sparse

to adequately explain to a skilled artisan how to modify Venable's system to identify vestibulo-

ocular movement. But as the examiner and Board correctly found, Publicover's specification is just

as sparse on how a system would identify this type of eye movement."); *see also* Dkt. 762 (Final

Charge to the Jury) at 11 ("If one of the claimed inventive features of a claim over the prior art

1 received very little explanation in the patent specification, then you may infer that the inventor

2 expected those of ordinary skill in the art already understood how to implement that aspect of the

3 claimed invention."). Especially in view of the fact that the Sonos 2005 system already included

4 one zone scene (party mode), no reasonable jury could find that Google did not show a reasonable

5 expectation of success.

6   **4.   *Sonos Did Not Prove Any Secondary Considerations***

7   Sonos asserts that it provided "substantial evidence of secondary considerations of non-

8 obviousness." Dkt. 754 at 23. But Sonos's only evidence was a single 2020 article from "CNN

9 Underscored." TX6780. Sonos contends that the article showed industry praise and that there is a

10 *presumption* of nexus because it describes the Sonos S2 application that allegedly practices the

11 asserted patents. Dkt. 754 at 23. Sonos relies on the wrong legal framework because the

12 presumption of nexus does not apply where, as here, the item receiving praise is a multi-component

13 product that is not *the invention* itself. It applies only "when the patentee shows that the asserted

14 objective evidence is tied to a specific product and that product embodies the claimed features, *and*

15 *is coextensive with them*." *Fox Factory, Inc. v. SRAM, LLC*, 944 F.3d 1366, 1373 (Fed. Cir. 2019)

16 (cleaned up, emphasis added). "Conversely, when the thing that is commercially successful is not

17 coextensive with the patented invention—for example, if the patented invention is only a component

18 of a commercially successful machine or process, the patentee is not entitled to a presumption of

19 nexus." *Id.* (cleaned up). Here, the S2 app is not *coextensive* with the claimed features. Sonos's

20 witnesses discussed "really important" features included in the S2 that are *unrelated* to this

21 invention. Trial Tr. 287:2-13 (noting that S2 "introduced some really important features . . .

22 including support for high-res audio formats").

23   In any event, the article Sonos relies upon is hardly the type of evidence that demonstrates

24 industry praise. The article is merely a type of "commerce content" whose purpose is to generate

25 revenue from reader purchases. At the top of the first page, the article expressly cautions that the

26 "CNN News staff is not involved" in the creation of the article, and that when a reader "make[s] a

27 purchase, [CNN Underscored] receive[s] revenue." TX6780 at 1. No reasonable jury could

28 conclude that Sonos's alleged secondary considerations overcome Google's strong invalidity

1   showing. *Ohio Willow Wood Co. v. Alps South, LLC*, 735 F.3d 1333, 1344, (Fed. Cir. 2013)

2   ("[W]here a claimed invention represents no more than the predictable use of prior art elements

3   according to established functions, as here, evidence of secondary indicia are frequently deemed

4   inadequate to establish non-obviousness."); *Odom v. Microsoft Corp.*, 429 Fed. Appx. 967, 973

5   (Fed. Cir. 2011) ("As for Odom's arguments of secondary considerations, we have stated that weak

6   secondary considerations generally do not overcome a strong prima facie case of obviousness.").

5.   *Google's Expert Applied The Definition of POSITA*

8   Sonos does not dispute that Dr. Schonfeld applied the correct definition of a person of skill

9   in the art. Indeed, both Dr. Almeroth and Dr. Schonfeld opined that if they used the others'

10   definitions, none of their opinions would change. Trial Tr. (Almeroth) at 760:23-761:12; *id*.

11   (Schonfeld) at 1334:2-1335:8. That is why the parties stipulated to a level of ordinary skill in the

12   art for the jury instructions. Dkt. 762. Sonos also does not dispute that Dr. Schonfeld considered

13   the obviousness of the invention *at the time of the invention*. Mot. at 24. Despite these facts, Sonos

14   perplexingly argues that Dr. Schonfeld "never acknowledged what a person of skill in the art would

15   have known at the time of the invention." Mot. at 24. It is unclear how Dr. Schonfeld could have

16   applied the correct definition of a POSITA, and applied his obviousness analysis at the time of the

17   invention, yet somehow not applied what that same person would have known at the time of the

18   invention. Nevertheless, Sonos argues that Dr. Schonfeld's opinions that minor modifications to

19   the Sonos 2005 System would have been "trivial" to a person of skill in the art did not adequately

20   explain how or why those modifications would have been obvious.

21   Sonos's own examples defeat its argument. Sonos argues that Dr. Schonfeld did not explain

22   why it would have been simple for a POSITA not to discard the speaker group identifiers and instead

23   save those identifiers for later, but he ***did*** explain, in the very sentence, how one would have made

24   that modification and why it would have been trivial. Mot. at 24. Namely, this change would

25   merely require not deleting the existing speaker group once it has been used, which Dr. Schonfeld

26   explained would have been simple for a POSITA because "you are just shifting one code and not

27   discarding the identifiers," which is "a very simple operation to do in the code." *Id.* It is hardly

28   implausible that a person of skill in the art in 2005 would know how to ***not*** delete something that

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1   was currently being used.

2   Furthermore, Dr. Schonfeld's discussion of the knowledge of a POSITA was based on a

3   multitude of prior art references. Dr. Schonfeld discussed, for example, the Yamaha DME

4   reference, which disclosed 999 zone scenes, Trial Tr. (Schonfeld) at 1341:2-1347:16, and the Bose

5   reference, which disclosed a saved party mode zone scene called "house" mode and overlapping

6   speaker groups. Trial Tr. (Schonfeld) at 1349:6-1352:2. Dr. Schonfeld also described at length the

7   other prior art references that informed the knowledge of a person of skill in the art, such as the

8   Nourse patent, Trial Tr. (Schonfeld) at 1438:6-1441:10, the Sonos Forums, Trial Tr. (Schonfeld) at

9   1432:9-1438:5, and the Squeezebox prior art system. Trial Tr. (Schonfeld) at 1441:11-

10 1451:9. Each of these references informed Dr. Schonfeld's opinions as to the knowledge of a

11 POSITA in 2005.

12   **6.   *Sonos's Arguments Regarding Prior Art Enablement Fail***

13 Sonos argues that Google did not prove that the obviousness references upon which it relies

14 were enabled. Under the law, however, prior art references in an obviousness combination need not

15 be enabled. *ABT Sys., LLC v. Emerson Elec. Co.*, 797 F.3d 1350, 1360 (Fed. Cir. 2015) ("ABT's

16 suggestion that Cornelius and Nakatsuno are non-enabled is misplaced, since even '[a] non-enabling

17 reference may qualify as prior art for the purpose of determining obviousness,' *Symbol Tech., Inc.*

18 *v. Opticon, Inc.,* 935 F.2d 1569, 1578 (Fed.Cir.1991), and even 'an inoperative device ... is prior art

19 for all that it teaches,' *Beckman Instruments, Inc. v. LKB Produkter AB,* 892 F.2d 1547, 1551 (Fed.

20 Cir. 1989)."). And there is no question that the obviousness combinations as a whole were enabled,

21 given that Dr. Schonfeld relies on voluminous source code for the Sonos 2005 products, enabled

22 patent publications (Nourse), and a prior art product with detailed specifications and source code

23 (Squeezebox). *E.g.*, Trial Tr. (Schonfeld) at 1374:2-1455:10.

24 Sonos did not identify a single prior art reference that it claims was not enabled, making it

25 difficult to respond to Sonos's vague and conclusory arguments. Instead, Sonos identified a single

26 sentence from Dr. Schonfeld's testimony as the sole support for its argument that the prior art is not

27 enabling. As noted above, however, Dr. Schonfeld did explain why a person of skill in the art would

28 have been able to ***save*** a speaker group for later use. *Supra* Section II.C.2. Sonos argues that Dr.

1   Schonfeld's testimony "boils down" to a "naked assertion" that it would have been obvious to save

2   something that was already created, but the specification of the asserted patents proves that this is

3   true. Indeed, the patents say nothing about *how* to save a zone scene because saving was a basic

4   and obvious concept in computerized systems at the time and required no explanation for a person

5   of skill in the art reading that disclosure. *See* Dkt. 762 (jury instructions) at 10-11. To the extent

6   Sonos is correct, and a detailed explanation for *how to save* is required for enablement, then Sonos's

7   own patent specification fails to enable those of ordinary skill to practice the alleged invention and,

8   thus, both the '885 and the '966 patents should be found invalid for lack of enablement.

9   Regardless, Dr. Schonfeld provided substantial evidence of enablement. Dr. Schonfeld

10 testified that the patent examiner, who is presumed to be a person of skill in the art, wrote that it

11 "would have been *obvious as a matter of routine experimentation* over the course of normal

12 operation by the average skilled practitioner upon the DME interface to create, *save*, *and recall*

13 various" speaker group configurations. Trial Tr. (Schonfeld) at 1343:6-1344:3 (emphasis

14 added). In other words, Dr. Schonfeld identified evidence that a person of skill in the art expressly

15 wrote that the modification he proposed would have been "obvious as a matter of routine

16 experimentation" for a person of skill in the art. *See id.* For the Sonos 2005 System, Dr. Schonfeld

17 opined that "we are talking about saving it for later, which means something very simple. It means

18 that you need to keep on operating as you are currently until you need it; and when you need it, you

19 have to make sure it's available. So as long as you allow for those two things, you meet the criteria

20 of saving it for later." Trial Tr. (Schonfeld) at 1388:22-1389:11. In other words, Dr. Schonfeld

21 opined that one would simply need to *not delete* already existing information in order to save the

22 speaker groups for later. Sonos makes no attempt to directly argue that this explanation of the trivial

23 concept of saving is inadequate for enablement. Once again, Dr. Almeroth had no rebuttal opinion.

24 **III.   CONCLUSION**

25   Sonos is not entitled to JMOL on any of the issues raised in its Motion.

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DATED: May 22, 2023

QUINN EMANUEL URQUHART & SULLIVAN, LLP

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By   _/s/ Sean Pak_

Sean Pak

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Melissa Baily

James D. Judah

5

Lindsay Cooper

Marc Kaplan

6

Iman Lordgooei

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Attorneys for GOOGLE, LLC

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GOOGLE'S OPPOSITION TO SONOS'S MOTION FOR JUDGMENT AS A MATTER OF LAW

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CERTIFICATE OF SERVICE

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Pursuant to the Federal Rules of Civil Procedure and Local Rule 5-1, I hereby certify that,

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on May 22, 2023, all counsel of record who have appeared in this case are being served with a copy

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of the foregoing via email.

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 /s/ Sean Pak
Sean Pak

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GOOGLE'S OPPOSITION TO SONOS'S MOTION FOR JUDGMENT AS A MATTER OF LAW